

# BMC 12L Servo Drives

- Economical Analog, 4 Quadrant Brushless Servo Drive
- 115 Vac Line Input
- Current Rated at 12.5A Continuous, 25A Peak
- Dip Switch Selectable Settings
- Torque & Velocity Control Modes
- Output short circuit and over temperature protection
- Compact, Surface-mount Drive Technology
- Inaudible, High Frequency PWM switching
- UL Recognized, CE Marked



## Drive Performance

Catalog Number	Voltage Range	Maximum Voltage	Max. Current Rating		Input Command	Min. Load Inductance	Switching Frequency	Bandwidth	Over Voltage Shut Down	Weight	
	Vac	Vdc	Cont. Amps	Peak Amps	Vdc range	mH	kHz	kHz	V dc	Kg	Lb
BMC 12L	25 - 130 V	170	12.5	25	+ / - 10	0.250	22	2.5	190	1.13	2.5

## Motor / Drive System Performance

Torque Limits		Speed	Rated Torque		Rated Speed	Rated Bus Voltage	Motor Inertia	Motor Diameter	Motor Catalog Number	Drive Catalog Number
Cont. Tcs	Peak Tps	Limit Wnl	Cont. Tcr	Peak Tpr	Speed Wr	Voltage Vb	Jm	inch		
lb-in	lb-in	rpm	lb-in	lb-in	rpm	Vdc	lb-in-s <sup>2</sup>			
7.2	18	6000	5.04	12.41	6000	170	0.00088	3.25	IB32002	BMC 12L
9.40	23	6000	6.45	15.04	6000	170	0.00113	3.25	IB32003	BMC 12L
11.3	23	6000	7.71	18.85	6000	170	0.00138	3.25	IB32004	BMC 12L
13.5	27	6000	8.91	20.51	6000	170	0.00163	3.25	IB32005	BMC 12L
15.6	31	5000	11.36	24.97	5000	170	0.00188	3.25	IB32006	BMC 12L
5.6	17	5000	4.63	8.73	3000	170	0.0006	3.25	IB34007	BMC 12L
8.4	25	6000	6.92	13.33	5000	170	0.0009	3.25	IB34002	BMC 12L
11.6	32	6000	9.59	17.72	4500	170	0.0011	3.25	IB34003	BMC 12L
13.4	28	5000	11.14	22.39	4500	170	0.0014	3.25	IB34004	BMC 12L
15.6	31	4500	13.02	26.08	4000	170	0.0018	3.25	IB34005	BMC 12L
18.1	37	4000	14.91	28.01	4000	170	0.0021	3.25	IB34006	BMC 12L
3.8	11	6000	2.87	5.94	4500	170	0.00014	2.25	AB23003	BMC 12L
7.5	23	6000	5.88	11.88	6000	170	0.00026	2.25	AB23001	BMC 12L
7.5	23	6000	5.92	11.5	5000	170	0.00026	2.25	AB23004	BMC 12L
7.5	23	4200	6.01	11.13	3000	170	0.00026	2.25	AB23005	BMC 12L
11.3	34	4900	9.01	14.68	3500	170	0.00037	2.25	AB23006	BMC 12L
15.6	39	6000	8.37	20.78	6000	170	0.0005	2.25	AB23002	BMC 12L
17.0	41	6000	15.06	26.38	4000	170	0.001	3.25	AB34000	BMC 12L
30.0	61	5450	26.91	40.41	3500	170	0.0018	3.25	AB34001	BMC 12L

Notes 1) System Performance may differ somewhat from these nominal values

The BMC 12L is a compact, high efficiency brushless drive providing economical analog torque or velocity control of medium power permanent magnet brushless motors. These drives have an integrated power supply and operate off 115V Vac. These Models interface with typical digital position loop controllers or can be operated as a stand-alone drive.

### Protection / Diagnostics

- Over-voltage protection
- Over-current protection
- Over Temperature protection
- Build in Test Mode
- LED Status Indicator
- Short Circuit Protection (built in fuses)

### Adjustments

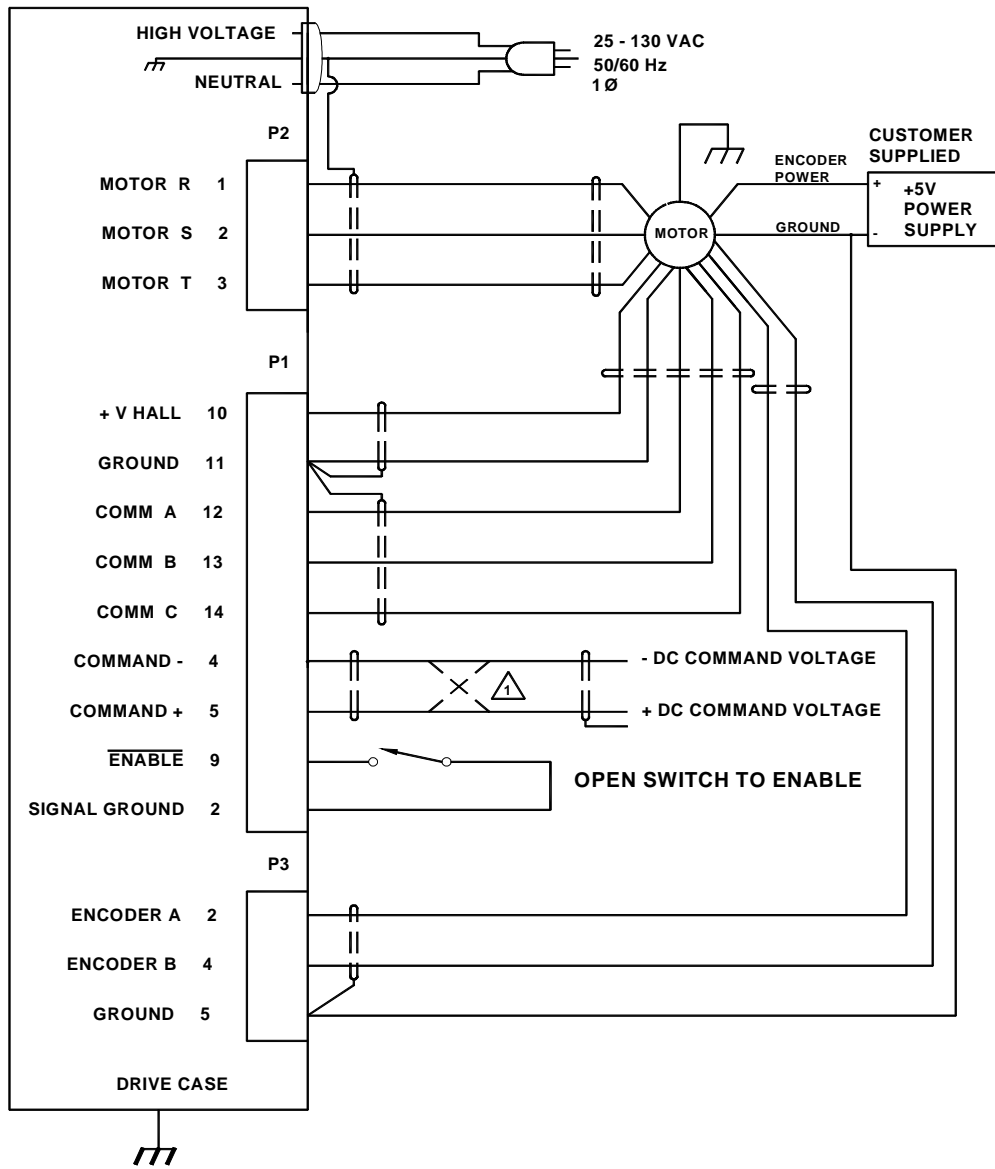
- Loop & Command Gain
- Current Limit (Peak and continuous)
- Offset

### General Features

- Back or Side Panel Mounting
- +/- 10 V Regulated Outputs (5mA)
- Built in Shunt Regulator
- Inhibit Line ( turns off outputs )
- Modes (current, velocity, open loop)
- 2 Velocity Modes Option (tach or encoder)
- Fault, Current and Velocity Outputs
- Differential analog Command Input +/- 10V
- Contact MCG for Motor power cables



# Typical Connection Diagram - BMC 12L



## Dimensions - BMC12L

